

Claims

1. Toxic-substance treatment equipment comprising:

a heating container which has a heating chamber to hold waste containing toxic substances;

a pressure-reducing means which sucks air out of the heating chamber to reduce the pressure in  
5 the heating chamber; and

a heating means which heats the inside of the heating chamber,

the heating container being cylindrical, the heating means including a plurality of heating units disposed longitudinally of the heating container and a controller to control the order of operation of the heating units.

10 2. The toxic-substance treatment equipment according to claim 1, wherein:

the heating container includes

a main treating section wherein waste to be treated is put,

a front auxiliary treating section which is disposed in front of the main treating section, and

a rear auxiliary treating section which is disposed in the rear of the main treating section; and

15 the heating means includes

a main heating unit to heat the main treating section,

a front auxiliary heating unit to heat the front auxiliary treating section, and

a rear auxiliary heating unit to heat the rear auxiliary treating section.

3. The toxic-substance treatment equipment according to claim 1, wherein the heating means (i)

20 is cylindrical and fitted onto the outside of the cylindrical heating container, (ii) includes a plurality of cylindrical heaters and a plurality of cylindrical heat insulators, the insides of the cylindrical heaters being in contact with the outside of the cylindrical heating container, the outsides of the cylindrical heaters being covered by the cylindrical heat insulators, and (iii) is separable from the cylindrical heating container.

25 4. Toxic-substance treatment equipment comprising:

a heating container which has a heating chamber to hold waste containing toxic substances;

a pressure-reducing means which sucks air out of the heating chamber to reduce the pressure in  
the heating chamber; and

a heating means which heats the inside of the heating chamber,

30 the heating means (i) being fitted onto the outside of the heating container, (ii) including at least one heater and at least one heat insulator, the inside of said at least one heater being in contact with the outside of the heating container, the outside of said at least one heater being covered by said at least one heat insulator, and (iii) being separable from the heating container.

5. The toxic-substance treatment equipment according to claim 4, wherein the heating container

35 is cylindrical and the heating means includes a plurality of heating units disposed longitudinally of the heating container and a controller to control the order of operation of the heating units.

6. The toxic-substance treatment equipment according to claim 1 or 4, wherein baffle plates are provided on the ceiling of the heating chamber to control the flow of gas in the longitudinal directions of the heating chamber.

40 7. The toxic-substance treatment equipment according to claim 1 or 4, wherein a ceramic layer

is formed on the inside of the heating container and radiates heat from the heating means into the heating chamber.

8. The toxic-substance treatment equipment according to claim 1 or 4, further comprising a pressure-adjusting unit which feeds inert gas into the heating chamber and keeps the pressure in the heating chamber at a certain level.

9. The toxic-substance treatment equipment according to claim 1 or 4, further comprising a gas-treating means which detoxifies the gas discharged from the heating chamber.